



Company Overview

Washer Technology

Torrent Technology™

Cyclone Technology™



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- **HORIZON** Performance Technologies LLC is a complete design/build engineering company of industrial capital equipment in the heat processing, cleaning and material handling areas. Our management team has over 100 years experience in the heat processing area.
- **HORIZON** Performance Technologies was formerly known as
  - LaX Engineered Solutions LLC

## Model #15922 Continuous Torrent Technology™

- **A Three (3)-Stage Spray Washer powered by Torrent Technology™**



*View through washer housing*

*"click on  
Video"*



*Rotational  
Spray Riser  
"X"*



*Various metal parts processing*



## Model #15922 Continuous Torrent Technology™

**Production hours: 8-24 hours/day**

**Product Description: Metal Parts**

**Max. Product Dimensions and Weight 2' W x 4' H x 6' L, 150 lbs.**

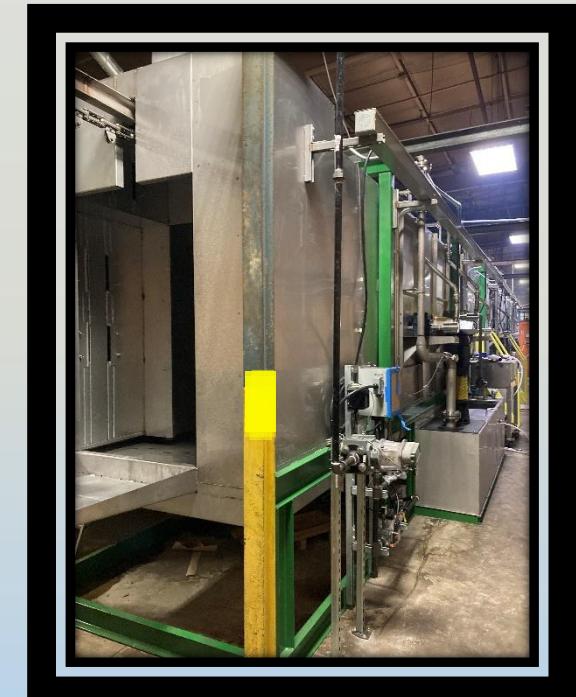
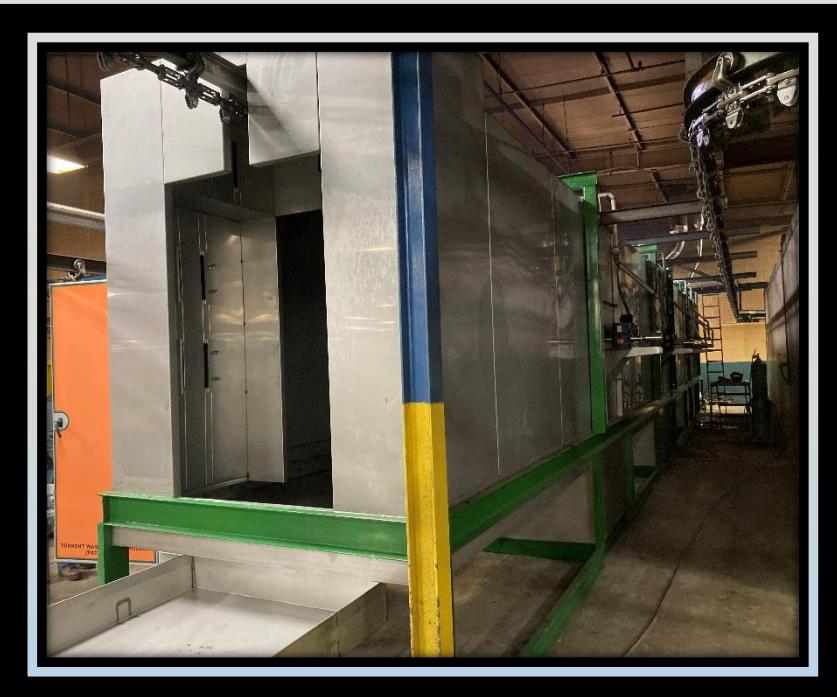
**Silhouette Openings: 3' W x 5' H**

**Production Rate and Weight: up to 12 FPM, & 10,000 pounds per hour**

**Product Configuration: Hanging on 4" I-Beam conveyor**

**• Budget Price \$545,000.00\***

**\*subject to fluctuating material prices without notice.**



## Mini-Torrent #1800 Wash-System

- *A Single or Multi-Stage Spray Washer powered by Torrent Technology™*
- *Combine several chambers with conveying systems for an automated cleaning process.*
- *Heated & Ambient Stages*



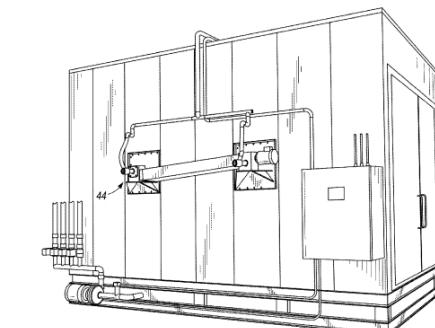
# Patented Torrent Washer™ Technology

**HORIZON** has incorporated innovative high performance and energy saving solutions to the traditional washer systems by replacing traditional risers with rotating risers that provide for better cleaning with 20-25% the amount of flow and energy.

These enhancements have resulted in the following benefits:

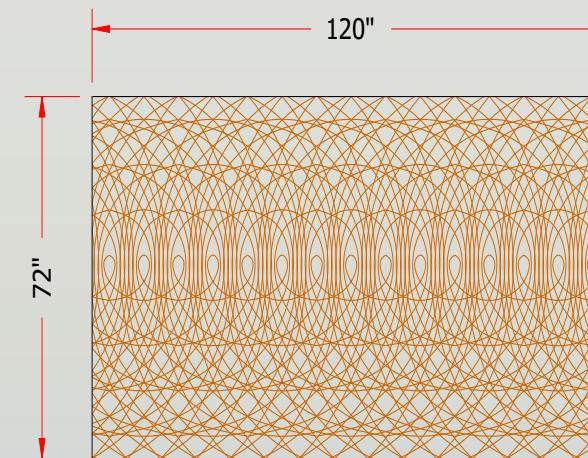
- Less Water usage due to Evaporation (20-25% water sprayed)
- Reduced Chemical Usage
- Up to 67% Less Electrical Usage (75-80% smaller pumps)
- Up to 77% Less Gas Usage (less atomization=less evaporation)
- Significant reduction in Exhaust and Emissions
- Reduction in Maintenance Costs (smaller pumps, fittings, valves, less nozzles)
- Direct Impingement to Leading and Trailing Ends of the Part
- Sprays/Cleans in Nooks and Crannies
- Reduction of Exhaust when doors are closed on batch units (VFD Control)

(12) United States Patent	(10) Patent No.:	US 8,960,207 B2
Mitchell	(45) Date of Patent:	Feb. 24, 2015
<b>References Cited</b>		
(54) AQUEOUS WASHER WITH ROTATING ARMS WITH NOZZLES	(56) U.S. PATENT DOCUMENTS	
(75) Inventor: Jeffrey C. Mitchell, East Troy, WI (US)	2,631,666 A * 12/1952 Orms ..... 134:57 R	
(73) Assignee: LAX Engineered Solutions LLC, Waukesha, WI (US)	3,054,411 A * 9/1962 Randall ..... 134:111	
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 781 days.	5,133,375 A * 7/1992 Schinzing et al. ..... 134:123	
	5,494,062 A * 2/1996 Springer ..... 134:58 D	
	5,546,360 A * 8/1996 Springer ..... 134:186	
	2005/0109378 A * 5/2005 Lansdiedel et al. ..... 134:135	
	2006/0201537 A1* 9/2006 Strothoff et al. ..... 134:42	
	2010/0139719 A1* 6/2010 Graedinger et al. ..... 134:56 D	
	* cited by examiner	
(21) Appl. No.: 13/190,668	Primary Examiner — Michael Barr	
(22) Filed: Jul. 26, 2011	Assistant Examiner — Benjamin L Osterhout	
(65) Prior Publication Data	(74) Attorney, Agent, or Firm — James Earl Lowe, Jr.	
US 2013/0025639 A1 Jan. 31, 2013		
(51) Int. Cl.	(57) ABSTRACT	
B08B 3/02 (2006.01)	A washer adapted to wash a part with a solution, the washer comprising spaced apart sidewalls, and at least one arm rotatably mounted near its center on at least one of the sidewalls. The arm has a central portion and an angled portion, the angled portion near the one arm end and angled relative to its adjacent arm central portion. The washer also includes a plurality of nozzles spaced apart along the arm central portion and the arm angled portion between near the one arm end and near the other arm end.	
U.S. Cl.		
CPC ..... 134/172; 134:111; 134/144		
(58) Field of Classification Search		
CPC ..... B08B 3/02 (2013.01)		
USPC ..... 134/111, 144, 172		
	See application file for complete search history.	
	11 Claims, 8 Drawing Sheets	

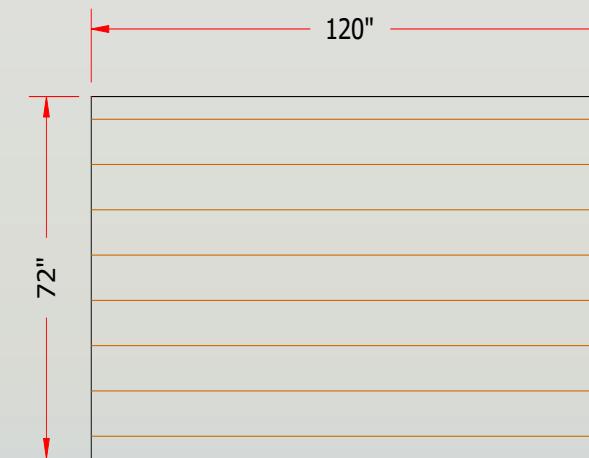


# Torrent Washer™ Direct Impingement

## Pattern vs. Traditional Impingement



Direct Impingement Pattern for  
Torrent Rotating Nozzle System



Direct Impingement Pattern for  
Traditional Washer Design

Stationary Risers/Nozzles  
make Stationary Lines

*Thank You For Considering*  
*HORIZON Performance*  
*Technologies LLC.*

*Contact us Today!*

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